



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,740	11/26/2003	Yong Jae Lee	K-0584	3951
34610 7590 12/28/2006 FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			EXAMINER PATEL, RITA RAMESH	
			ART UNIT	PAPER NUMBER
			1746	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/28/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/721,740

Applicant(s)

LEE, YONG JAE

Examiner

Rita R. Patel

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Applicant's Arguments / Amendments

This Office Action is responsive to the amendment filed on 10/5/06. Claims 9-20 have been added. Claims 1-4 and 6-7 have been amended. Claims 1-20 are pending. Applicant's arguments have been fully considered but are not persuasive. Upon further consideration, the instant claims are rejected under new grounds of rejections and thus, claims 1-20 are finally rejected for the reasons of record.

In response to applicant's remarks that Thies neither discloses nor suggests any type of backflow-preventing passage with its inlet connected to the drain conduit 55, and its outlet connected to the drain hose (pg. 11), the Office would like to clarify its position over its prior Thies rejection. Thies's disclosure of drain tube 58 reads on applicant's claim for a drain hose and the passageway formed within said tube reads on applicant's claim for a drain passage; thus removing the argument that drain conduit 55 reads on said drain passage. The entirety of applicant's arguments/remarks are founded on this basis. The Office clarifies its position below with regard to independent claims 1 and 15 and all dependent claims therefrom.

Claim Objections

Claims 1-20 are objected to because of the following informalities: applicant uses "configured to" language in said claims, however, this language provides no structural claim limitations to the claims because it is merely the intended use of the

Art Unit: 1746

apparatus. It is well settled that the intended use of a claimed apparatus is not germane to the issue of the patentability of the claimed structure. If the prior art structure is capable of performing the claimed use then it meets the claim. *In re Casey*, 152 USPQ 235, 238 (CCPA 1967); *In re Otto*, 136 USPA 459 (CPA 1963). Appropriate correction is required.

Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 2 fails to further limit claim 1 because of the "configured to" language; such language is merely the intended use of the apparatus and fails to delimit any further structural limitations, thus merely reiterating structural components of claim 1.

Claim 7 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 7 fails to further limit claim 6 because of the "configured to" language; such language is merely the intended use of the apparatus and fails to delimit any further structural limitations, thus merely reiterating structural components of claim 6.

Claims 12-14 and 18 objected to because of the following informalities: said claims use the terms "when the check valve is closed", however, this particularly stated situation of a closed check valve is not required, merely a possibility and therefore,

Art Unit: 1746

being non-required, the condition that follows a closed check valves it is not a patentably significant limitation of the claim because it is not positively recited or a required limitation. The Office notes that such claim limitations provided by these conditional statements are not required by the claims language and thus, not afforded patentable significance over interpretation of the claims.

Claims 12-14 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 12-14 fail to further limit the prior claim because of the "configured to" language; such language is merely the intended use of the apparatus and fails to delimit any further structural limitations, thus merely reiterating structural components of claim 11.

Claim 17 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 17 fails to further limit claim 15 because of the "configured to" language; such language is merely the intended use of the apparatus and fails to delimit any further structural limitations, thus merely reiterating structural components of claim 15.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 8-18, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Thies et al. herein referred to as "Thies" (US Patent No. 6,103,017).

Thies teaches a dishwasher including a drain pump 54 which can drain the sump region 18 by drawing wash liquid through a drain port 62. Thies disclosure of sump region 18 reads on applicant's claim for a sump; drain pump 54 reads on applicant's claim for a drain pump; the passageway formed by drain tube 58 reads on applicant's claim for a drain passage; drain tube 58 reads on applicant's claim for a drain hose; and check valve 57 reads on applicant's claim for a check valve.

To purge the system's accumulator 50, the drain port 62 is closed by a pressure operated control valve system 60 such that the sump 18 is separated from the drain pump when the wash sump 28 is operating. The control valve system 60 may be any type of system responsive to pressure generated by the operation of the wash pump 28, and is illustrated as a movable valve stem 61 supporting a plug seal 63 (col. 5, lines 42-56). As seen in Figure 2, drain tube 58 is shown integrally connected to said drain port 62 and drain pump 54; the drain tube 58 has a peak point of an inverted u-shape piece that is disposed higher than the sump, to prevent the water from flowing backward. This reads on applicant's claims for a sump, drain pump with a drain hose attached thereon,

Art Unit: 1746

a backflow-preventing passage having a peak point of an inverted u-shape piece, and a check valve for actuation in accordance with the drain pump.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3-7 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thies as applied to claims above.

A coil spring 67 is compressed between a spring retainer 69 and the backside of the upper pressure surface 61a such that the upper pressure surface 61a is urged upwardly into a cavity 71 (col. 5, lines 59-62); such that when there is insufficient wash liquid to pressurize the cavity 71, the valve stem 61 is biased upwardly, to open drain port 62. Thies's teaching of a movable valve stem 61 reads on applicant's limitation for a hinged sealing member and Thies's disclosure of plug seal 63 reads on an annular rib. Moreover, Thies maintains that it can be understood by one skilled in the art that the operation of control valve system 60 allows for a thorough pump-out of wash liquid during drainage such that little wash liquid remains in the sump 18 at the completion of a drain cycle (col. 6, lines 40-45).

Thies teaches coil spring and spring retainer combination with the apparatus for control valve system 60, however re heck valve 57 Thies fails to further describe the

Art Unit: 1746

mechanism by which it operates; it would have been obvious to one of ordinary skill in the art at the time of the invention to use a system similar to the control valve system 60 in the check valve of Thies for achieving controlled liquid flow. Controlled liquid flow is necessitated at the top of drain tube 58 for eliminating clogging, siphoning water from the pump, controlling drainage, and permit optimal aqualization of the air in the drain tube (col. 5, lines 12-26). Additionally, Thies's plug seal 63 would read on applicant's claim for a plug seal in check valve 57.

Moreover, Thies teaches the claim invention except fails to stately disclose the material composition of the plug member 63. However, forming said sealing member of Thies from a rubber-based material would have been obvious to one of ordinary skill in the art at the time of the invention, as claimed by applicant, because this material is commonly known in the art of dishwashing apparatuses to be an effective sealing component. Rubber-based sealing members are often marked by resiliency, cost effectiveness, reactively inert properties and environmentally friendly characteristics, thus making rubber-based seals in dishwashing apparatuses commonly known features used in the art. Motivation to make a specific structure is always related to the properties or uses one skilled in the art would expect the structure to have. *In re Newell* 13 USPQ 2d 1248, 1250 (Fed. Cir. 1989); *Fromson v. Advance Offset Plate* 225 USPQ 26, 31 (Fed. Cir. 1985); *In re Gyurik* 201 USPQ 552, 557 (CCPA 1979).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 8-5.

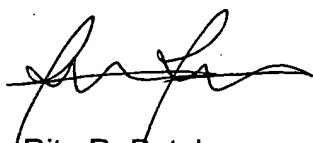
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 1746

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Rita R. Patel



MICHAEL BARR
SUPERVISORY PATENT EXAMINER